

REMARKS

Claims 9-12 currently appear in this application. The Office Action of March 10, 2003, has been carefully studied. These claims define novel and unobvious subject matter under Sections 102 and 103 of 35 U.S.C., and therefore should be allowed. Applicants respectfully request favorable reconsideration, entry of the present amendment, and formal allowance of the claims.

Specification

The abstract of the disclosure is objected to because of the use of phraseology often used in patent claims.

It is respectfully submitted that it is immaterial if "legal" language is used in an abstract, because the abstract has no legal significance—it is only the claims that are legally significant with respect to patent protection. Nonetheless, a new abstract of the disclosure is submitted on a separate sheet.

The specification has been extensively amended to include proper idiomatic English. As the specification submitted herewith is submitted showing changes made, it is clear that no new matter has been added.

Claim 7 is objected to as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim.

Claim 7 has been cancelled, and claims 1-8 replaced with new claims 9- 12.

Rejections under 35 U.S.C. 101

Claim 8 is rejected under 35 U.S.C. 101 and 35 U.S.C. 112, first paragraph, because the claimed invention is not supported by either a specific asserted utility or a well-established utility.

This rejection is respectfully traversed. Claim 8 has now been cancelled. However, it is respectfully submitted that one skilled in the art could readily appreciate the usefulness of a single stranded DNA library for testing purposes.

Rejections under 35 U.S.C. 112

Claims 1-6 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

This rejection is respectfully traversed.
Claims 1-6 have been cancelled and replaced by new claims

9-12. Claim 9-12 are based upon the flow charts in Figures 3 and 5.

Claims 1-6 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly acclaim the subject matter which applicant regards as the invention.

This rejection is respectfully traversed. Claims 1-6 and 8 have been replaced by new claims 9-12. it is believed that the positive steps recited in claims 9-12 are sufficient to conform to the requirements of 35 U.S.C. 112.

Double Patenting

Claims 1-6 and 8 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 4 and 5 of Takahashi et al., U.S. Patent No. 6,489,111.

This rejection is respectfully traversed. The method of Takahashi et al. relates to an apparatus for producing an immobilized DNA on a substrate. However, the method of the present invention relates to a **continuous** method for constructing a DNA library. It is clear from the flow charts of Figures 3 and 5 that the method for constructing the supports and replicas thereof is a continuous process, and such a continuous process has not been described or suggested in Takahashi et al.

Art Rejections

Claims 1, 3, 4, 6 and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Takahashi et al.

This rejection is respectfully traversed. The present invention, unlike Takahashi et al., provides a continuous process for producing DNA libraries. There is nothing in Takahashi et al. that discloses or even suggests a process for producing DNA libraries that can be conducted in a continuous, rather than a disparate, process.

Claims 1 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Schena et al. (PNAS, 1996) or Schmidt et al.

This rejection is respectfully traversed. The method of the present invention includes delivering TE (tris ethylene diamines tetraacetic acid) solution into a container by driving liquid feeding means. The temperature of the container holding means is heated to 90°C by driving the solution temperature control means so as to hybridize mRNA. This step is included in the new claims, and is described in the specification as filed at page 6, lines 9-14.

Neither Schena et al. nor Schmidt et al.
discloses or suggests a step in which a cleaning solution

is added and then the temperature of the container is heated to 90°C in order to hybridize mRNA.

Claims 2-6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over any one of Takaishi or Schena or Schmidt in view of Keller et al.

This rejection is respectfully traversed. Neither Schena nor Schmidt discloses a step in which a cleaning solution is driven into a container containing the supports to be treated and raising the temperature to 90°C for hybridize the mRNA. Takaishi et al. do not disclose a continuous process for producing immobilized DNA libraries. Keller et al. merely disclose that a method that produces a single strand DNA immobilized on a solid support is useful for understanding the biological function of a protein or mRNA whose function is known.

This rejection is respectfully traversed. There is nothing in Keller et al. that suggests conducting the process in a continuous manner, nor of adding cleaning solution and then heating the temperature to 90°C to hybridize the mRNA.

In view of the above, it is respectfully submitted that the claims are now in condition for allowance, and favorable action thereon is earnestly

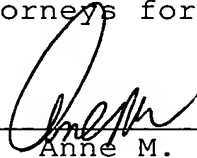
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solicited.

Respectfully submitted,

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